

Claims

- [c1] 1. A method for distributing media content to clients having peer-to-peer connectivity, the method comprising:
- hosting an online catalog having a selection of media items available from a central repository, wherein at least some of the media items have already been previously transferred from the central repository to some of the clients;
 - responsive to the online catalog, receiving from each client a prioritized list of media items desired to be received for use;
 - based on the prioritized lists received from the clients and based on where various media items reside, determining a schedule for transferring media items; and
 - transferring the media items pursuant to the schedule, including transferring at least some of the items between clients using peer-to-peer connectivity.
- [c2] 2. The method of claim 1, further comprising:
- upon completion of transfer of a particular media item at a given client, indicating at the client that the particular media item may be purchased for use.

- [c3] 3. The method of claim 1, wherein the selection of media items includes audio/video media items.
- [c4] 4. The method of claim 1, wherein the selection of media items includes various file types.
- [c5] 5. The method of claim 1, wherein the hosting step includes pre-loading media items on client devices supplied to users.
- [c6] 6. The method of claim 5, wherein said step of pre-loading media items includes pre-loading particular media items based upon user requests for particular media items.
- [c7] 7. The method of claim 5, wherein said step of pre-loading media items includes pre-loading particular media items based upon predicting media items likely to be needed.
- [c8] 8. The method of claim 1, wherein the transferring step includes transferring the media items to client playback devices.
- [c9] 9. The method of claim 1, wherein the determining step includes determining a schedule that minimizes bandwidth requirements.

- [c10] 10. The method of claim 1, wherein the determining step includes determining a schedule that minimizes transfers from the central repository.
- [c11] 11. The method of claim 1, wherein the determining step includes determining a schedule that maximizes transfers between clients that can occur within a reasonable period of time.
- [c12] 12. The method of claim 1, wherein the determining step is also based on storage available at each client for receiving media items.
- [c13] 13. The method of claim 1, wherein the transferring step includes transferring the media items using broadband connectivity.
- [c14] 14. The method of claim 1, wherein each media item is transferred in encrypted format.
- [c15] 15. The method of claim 14, further comprising:
receiving purchase instructions from a given client; and
in response to receiving the purchase instructions, decrypting the particular media item for playback at the given client.
- [c16] 16. The method of claim 15, further comprising:
checking the given client's account status before de-

crypting the particular media item for playback at the given client.

[c17] 17. The method of claim 1, wherein the determining step includes:

determining which media items may be transferred from one client to another.

[c18] 18. The method of claim 17, wherein the determining step further comprises:

determining which media items need to be transferred from the central repository to clients.

[c19] 19. The method of claim 1, wherein the hosting step includes providing caching space at a client for storing media items not on the prioritized list of media items requested by said client.

[c20] 20. The method of claim 19, wherein said determining step includes determining which media items need to be transferred from the central repository to said caching space at the client.

[c21] 21. The method of claim 1, wherein the transferring step includes transferring the media items using wireless connectivity.

[c22] 22. The method of claim 1, wherein the transferring step

includes checking the media items transferred for determining that they have not been corrupted during the transfer.

[c23] 23. A computer-readable medium having processor-executable instructions for performing the method of claim 1.

[c24] 24. A downloadable set of processor-executable instructions for performing the method of claim 1.

[c25] 25. A system for distributing media content to clients having peer-to-peer connectivity, the system comprising:
an online catalog having a selection of media items available from a central repository, wherein at least some of the media items have already been previously transferred from the central repository to some of the clients;
a server for receiving from each client a prioritized list of media items desired to be received for playback, and for determining a schedule for transferring media items based on the prioritized lists received from the clients and based on where particular media items reside;
a network, in communication with the server, for transferring the media items pursuant to the schedule, including transferring at least some of the items between clients using peer-to-peer connectivity; and

client devices, in communication with the network, for storing and playing back transferred media items.

[c26] 26. The system of claim 25, wherein the selection of media items includes audio/video media items.

[c27] 27. The system of claim 25, wherein the selection of media items includes various file types.

[c28] 28. The system of claim 25, wherein transferred media items are transferred to the client playback devices for storage.

[c29] 29. The system of claim 25, wherein the schedule is determined in an effort to minimize bandwidth requirements.

[c30] 30. The system of claim 25, wherein the schedule is determined in an effort to minimize transfers from the central repository.

[c31] 31. The system of claim 25, wherein the schedule is determined in an effort to maximize transfers between clients that can occur within a reasonable period of time.

[c32] 32. The system of claim 25, wherein the schedule takes into account storage available at each client for receiving media items.

- [c33] 33. The system of claim 25, wherein the media items are transferred using broadband connectivity.
- [c34] 34. The system of claim 25, wherein each media item is transferred in encrypted format.
- [c35] 35. The system of claim 25, further comprising:
a module for receiving purchase instructions from a given client device; and
a module, responsive to the received payment instructions, for authorizing playback of the particular media item at the given client device.
- [c36] 36. The system of claim 35, further comprising:
a module for checking the given client's account status before authorizing playback of the particular media item at the given client device.
- [c37] 37. The system of claim 25, wherein the server determines which media items may be transferred from one client to another.
- [c38] 38. The system of claim 37, wherein the server determines which media items need to be transferred from the central repository to clients.
- [c39] 39. The system of claim 25, wherein the network includes wireless connectivity.

- [c40] 40. The system of claim 25, wherein the online catalog is accessible via an Internet browser program.
- [c41] 41. The system of claim 25, wherein the online catalog is accessible from the client devices.
- [c42] 42. The system of claim 40, wherein the online catalog is accessible from the client devices via a selected one of online connectivity and a local database at the client devices.
- [c43] 43. The system of claim 25, wherein the client devices comprise set-top boxes.
- [c44] 44. The system of claim 43, wherein the set-top boxes include hard disk storage and broadband connectivity.
- [c45] 45. The system of claim 25, wherein the central repository comprises a media server.
- [c46] 46. The system of claim 45, wherein the media server stores downloadable video media.
- [c47] 47. The system of claim 25, wherein the server includes a customer management module for tracking account status of each client.
- [c48] 48. The system of claim 25, wherein the server includes a key vault storing decryption keys that may be trans-

ferred to clients for playing back transferred media items.

[c49] 49. The system of claim 48, wherein the server checks account status of a client before issuing a decryption key to the client.

[c50] 50. The system of claim 48, wherein the server checks geographic location of a client before issuing a decryption key to the client.

[c51] 51. The system of claim 48, wherein each decryption key automatically expires after some period of time.

[c52] 52. The system of claim 48, further comprising: television devices, in communication with the client devices, for playing back transferred media items.

[c53] 53. The system of claim 25, wherein at least some of the client devices communicate with said network through a network connection.

[c54] 54. A method for delivery of media content available on a plurality of devices having connectivity to one another, the method comprising:
determining media items available on each of said plurality of devices having connectivity to one another;
receiving priority lists from at least some of said plurality

of devices, wherein each priority list represents a prioritized list of media items requested at a particular device; selecting a particular media item to be delivered to a first device based on the priority lists and the media items determined to be available on the first device; identifying at least one second device having the particular media item to be delivered to the first device; and transferring the particular media item to the first device from at least one second device at which the particular media item is available.

[c55] 55. The method of claim 54, wherein said plurality of devices includes a plurality of client devices having peer-to-peer connectivity to one another.

[c56] 56. The method of claim 54, said plurality of devices includes at least one server having copies of media items for supply to client devices.

[c57] 57. The method of claim 54, wherein said step of selecting a particular media item to be delivered to a first device includes selecting the first device to receive the particular media item from said plurality of devices.

[c58] 58. The method of claim 57, wherein said step of selecting the first device includes determining a device least-most recently served by delivery of a media item.

- [c59] 59. The method of claim 57, wherein said step of selecting the first device includes comparing a priority list of a given device with the media items determined to be available on the given device, so as to evaluate need for delivery of a media item to the given device.
- [c60] 60. The method of claim 54, further comprising:
tracking measured performance of communications amongst said plurality of devices.
- [c61] 61. The method of claim 60, wherein said step of identifying at least one second device includes identifying at least one second device based, at least in part, on measured performance of communications between the first device and said at least one second device.
- [c62] 62. The method of claim 54, wherein said step of identifying at least one second device includes identifying said at least one second device based upon minimizing overall system bandwidth requirements.
- [c63] 63. The method of claim 54, wherein said step of identifying at least one second device includes making transfers from client devices having a copy of the particular media item when feasible, so as to conserve server resources.

- [c64] 64. The method of claim 54, wherein said step of identifying at least one second device includes identifying said at least one second device based upon minimizing time required to transfer the particular media item to the first device.
- [c65] 65. The method of claim 54, wherein said step of identifying at least one second device includes evaluating network location of the first device and said at least one second device.
- [c66] 66. The method of claim 54, wherein said step of identifying at least one second device includes determining a device least-most recently transferring a media item.
- [c67] 67. The method of claim 54, wherein said step of identifying at least one second device includes identifying a plurality of second devices, so as to share transfer of the particular media item amongst said plurality of second devices.
- [c68] 68. The method of claim 54, wherein said step of transferring the particular media item to the first device includes transferring portions of the particular media item from a plurality of second devices.
- [c69] 69. The method of claim 67, wherein transferring portions of the particular media item from a plurality of sec-

ond devices includes selecting a certain portion of a media item to be delivered by a particular second device.

[c70] 70. The method of claim 54, wherein said step of transferring the particular media item to the first device includes scheduling when the transfer should be initiated.

[c71] 71. The method of claim 54, wherein said step of transferring the particular media item to the first device includes determining which device should initiate communications for delivery of the particular media item to the first device.

[c72] 72. The method of claim 54, wherein said step of transferring the particular media item to the first device includes monitoring the transfer, so as to verify successful transfer of the particular media file to the first device.

[c73] 73. The method of claim 54, wherein the transferring step includes verifying the transfer, so as to confirm transfer of a correct copy of the particular media file to the first device.

[c74] 74. The method of claim 54, further comprising:
pre-loading media items on at least some of the plurality of devices.

[c75] 75. The method of claim 74, wherein said pre-loading

step includes pre-loading particular media items on a device based on user input at time of purchase of the device.

[c76] 76. The method of claim 74, wherein said pre-loading step includes pre-loading media items based, at least in part, on predicted demand for particular media items.